

REMARKS

Claim Rejections.

Claims 1, 3, 7, 8, 9, 11, 15, and 24 have been rejected under 35 U.S.C. § 102(b) over Schwesig.

The Examiner has identified the "safety circuit" of claim 1 as corresponding to microprocessors I1 and I2 of Schwesig which send signals IL1 and IL2 to switches S1 and S2. Applicant agrees that switches S1 and S2 of Schwesig meet the limitation of claim 1 of "controlling the application of power to the low power circuit" because these switches S1 and S2 control the power to opto-isolators OK1-OK6 (the "low power circuit" in Schwesig) which in turn "control the semiconducting switching devices". Schwesig thus meets part of the limitation of claim 1 relating to the "safety circuit".

Yet the same microprocessors I1 and I2 are clearly all or part of the logic circuits "generating signals to control the semiconductor switching devices" as is also recited in claim 1 (see generally signal TAS1-TAS3 in Schwesig). Thus, the microprocessors I1 and I2 cannot be "electrically independent of the "logic circuits" as required by claim 1 (because they are the "logic circuits"). Nor can switches S1 and S2 be considered electrically independent of the logic circuits (because they are electrically connected to the "logic circuits").

The importance of this electrical independence from the logic circuit is that it immunizes the safety circuit from failure of the logic circuit, in this case microprocessors including millions of transistors, each representing a possible failure point, and executing software that is also prone to failures. Any safety circuit that relies on these microprocessors or any safety circuit that is electrically dependent on these microprocessors is inherently less reliable. The present invention, by providing an electrically independent control of low-level power in the motor controller, is thus a non-obvious improvement over Schwesig.

In light of these remarks, it is believed that claim 1 and those claims dependent on claim 1 are allowable, and therefore allowance of claims 1-17 is hereby requested. The Examiner is encouraged to contact the undersigned directly at the telephone number provided below if there are minor issues or matters of form that need to be addressed.

Respectfully submitted,

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